

CASE STUDY

Drone flight management tools for London Oxford Airport and Blenheim Palace

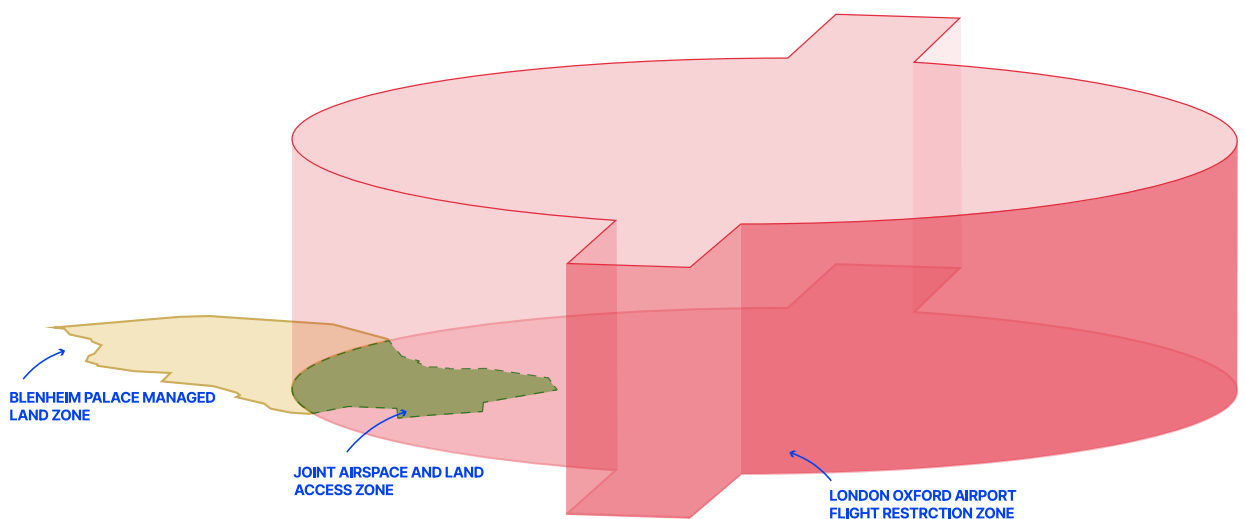
Summary

A First in Streamlining Drone Approvals: Two Organisations with Overlapping Areas, One Seamless Approval Process

LONDON OXFORD AIRPORT AND BLENHEIM PALACE CASE STUDY

London Oxford Airport and Blenheim Palace needed a better way to approve drone flight requests that needed approval from both airport and palace.

They found it in Altitude Angel's GuardianUTM Approval Services.



Blenheim Palace and London Oxford Airport land and airspace zones

London Oxford Airport

Nestled on the edge of the Cotswolds, London Oxford Airport is home to business aviation and five flight training schools, all adding up to roughly 60,000 movements each year.

And adding drone flights on top of that was starting to cause problems.

"The hardest thing about having drones operating within our Flight Restriction Zone (FRZ) was the flow of information and the consistency of that information. It took a massive amount of time and there was no consistency."

Kris Black, Operations Director at London Oxford Airport

Drone operators sent their requests by phone or email, and each request would contain different levels of detail. It took time for the Operations Team to gather all the information they needed. Then they had to figure out how to collate everything into a standard format that was quick and easy for Air Traffic Control to understand.

LONDON OXFORD AIRPORT & BLENHEIM PALACE

Aerial photo of London Oxford Airport. Courtesy of London Oxford airport



“We wanted a tool that could collate the information and bring some standardisation. All the information in one place, a single source of truth.”

**Kris Black, Operations Director at
London Oxford Airport**

Complicating matters further was the airport’s relationship with Blenheim Palace.

Blenheim Palace

Blenheim Palace is a UNESCO World Heritage site comprising both the palace itself and an estate of around 10,000 acres. It hosts numerous events throughout the year, including its famous illuminated Christmas trails, the Game Fair, flower show, weddings and summits between European leaders.

Welcoming over 1 million visitors a year, protecting both people and heritage is of utmost importance to the palace team. And with so much activity and so much heritage, the palace is naturally a desirable destination for drone operators.

"We have lots of drone requests for filming. Bridgerton films here, as do a couple of other Netflix dramas, and then we have quite a lot of local TV interest. We also have our own teams who need to conduct drone flights, to count deer on site, inspect our roofs, or see where we can put some additional telecom infrastructure."

Lesley Cox, Head of Health and Safety at Blenheim Palace

The Palace Safety Team was facing similar problems to London Oxford Airport in handling drone flight requests, with last-minute requests and incomplete risk assessments taking time away from other work.

And the team faced an extra layer of complexity when a drone operator requested to fly over the portion of the Blenheim Palace estate that sat beneath London Oxford Airport's Flight Restriction Zone.

The airport, palace, and drone operator would have to conduct a three-way conversation to ensure everyone had the information they needed and everyone knew whether the flight could go ahead or not.

"There was the potential for error. You're only as good as your weakest link. Somebody can miss something, emails get lost. And if a request needs to be approved by us and the airport and one of us missed it, that caused confusion."

**Lesley Cox, Head of Health and Safety
at Blenheim Palace**



Making it safer and easier with Altitude Angel

Altitude Angel first appeared on the radar, as it were, as a result of Altitude Angel's work with Biggin Hill Airport. It was clear that GuardianUTM could help solve the problems London Oxford Airport was facing, but what about the relationship with Blenheim Palace?

We got to work with London Oxford Airport first, implementing GuardianUTM within their existing workflow in just three months, from internal sign-off to staff training.

And the benefits were immediate.

LONDON OXFORD AIRPORT & BLENHEIM PALACE



UAV with camera flying over rural area

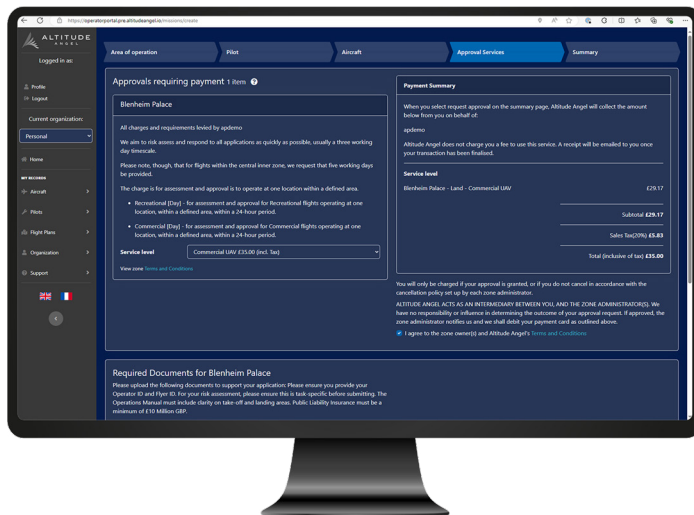


With every request coming through the same system and in the same format, London Oxford Airport had the consistent, standardised information it needed. The Operations Team didn't need to chase details or spend time trying to collate requests into a consistent format.

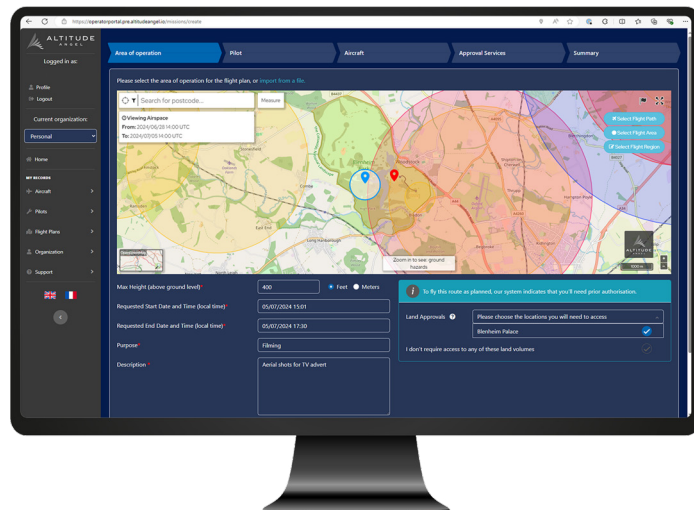
Air Traffic Control could see all the day's drone flights in one place and in one format, which saves time, improves safety, and provides peace of mind.

"The consistency of the data and the availability of the data to various different teams is the biggest win."

Kris Black, Operations Director at London Oxford Airport



Blenheim Palace approval services requirements on Operator Portal



Area of operation on Operator Portal for Blenheim Palace

Building bespoke solutions

After the successful implementation, Kris recommended GuardianUTM to Blenheim Palace, and we set about building new tools so the airport and palace could work together on the same requests.

"I liked the fact that Altitude Angel have thought about drone flight approvals from all aspects. The flight approval process is very straightforward for both drone operators to submit their applications and for us to see the information in one place and approve flights."

**Lesley Cox, Head of Health and Safety at
Blenheim Palace**

Altitude Angel built a bespoke link into GuardianUTM for requests that require approval from both the airport and palace. If a drone operator submits a flight request that requires approval from both London Oxford Airport and Blenheim Palace, both airport and palace get the request along with the information they need.

"For example, I ask for evidence of public liability insurance. London Oxford Airport don't require that, but they'll get the documentation they need."

Lesley Cox, Head of Health and Safety at Blenheim Palace

Perhaps more importantly, all parties can see who has approved the request. And the drone operator isn't left with questions; they get clear confirmation if their flight has been approved. Payment is only taken on joint approval, making flight planning and administration for the drone operator significantly easier and less time consuming. Should either the airport or palace need to withdraw approval, the drone operator receives notification and a full refund.



Looking ahead

GuardianUTM brought data consistency, time savings, and improved safety to both London Oxford Airport and Blenheim Palace.

With GuardianUTM implemented, it was easy to activate Approval Services. Now, once both parties have undertaken their checks and approved a request, the administration fee is taken directly through the platform. No delays for the drone operator and helping both airport and palace recover some of their investment in handling drone flight requests.

And we continue to work with both airport and palace to make changes and implement new features to make things even easier for them and the drone operators they welcome into their airspace.

"We've suggested some improvements and they've already introduced those into the system."

Kris Black, Operations Director at London Oxford Airport

"Ray from Altitude Angel has been an absolute superstar. As soon as you've sent the email, he's either picking the phone up to you or he's got back straight back to you."

Lesley Cox, Head of Health and Safety at Blenheim Palace

If you need an easier way to manage drone flights in your airspace or from your land, speak to a member of our team today about GuardianUTM Approval Services.

FIND OUT MORE ABOUT
APPROVAL SERVICES

VISIT OUR
LANDOWNERS WEBPAGE

EMAIL US AT
CONTACT@ALTITUDEANGEL.COM



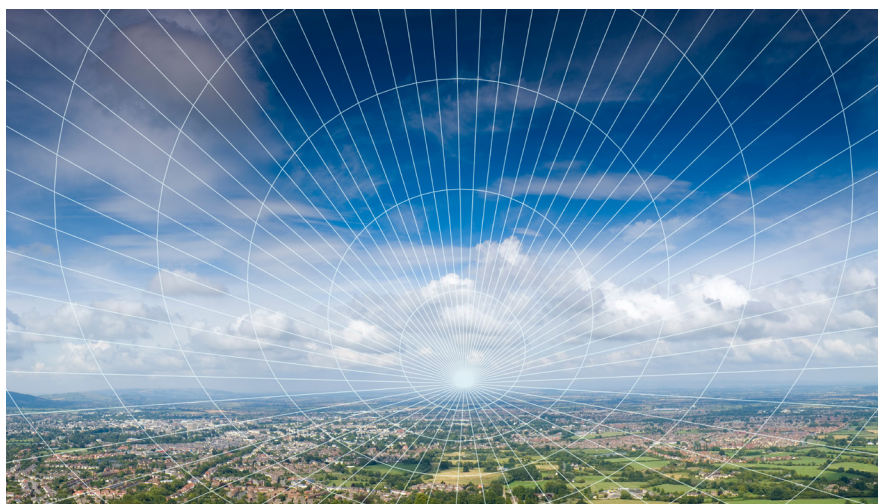
About Altitude Angel

Founded by Richard Parker in 2014, Altitude Angel is an aviation technology company which creates global-scale solutions to enable the safe integration of drones into airspace.

Altitude Angel's core, cloud based, technology platform is GuardianUTM. GuardianUTM supports both U-space and Unified Traffic Management (UTM) and delivers market-leading services to all aviation stakeholders including ANSPs, national aviation authorities, airspace managers, drone operators, manufacturers, and software developers. Altitude Angel's innovative solutions enable users to access a rich source of real-time airspace, environmental and regulator data.

Altitude Angel provides drone operators free access to planning tools such as [Drone Assist](#), dronesafetymap.com, and [Operator Portal](#). These tools allow drone operators to efficiently plan flights, check safety information and request approvals in UTM Ready zones (where either land access managers or airspace authorities have integrated their locations into the GuardianUTM platform).

Altitude Angel is also leading the advancement of drone superhighways in the sky, enabling deconflicted automated drone flight to build a scalable drone solution to benefit society, businesses, and industry, on level and fair terms, accessible to everyone.



Contact

International Headquarters:

Altitude Angel Limited, The Blade, Abbey Square, Reading,
RG1 3BE, United Kingdom
Tel: +44 (0)118 391 3503

EU Operations:

Altitude Angel (Netherlands) B.V., Element Offices Leiden,
Bargelaan 200, 2333 CW Leiden, Netherlands
Tel: +31 (0)71 760 1691

ALTITUDEANGEL.COM



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